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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,877	02/01/2001	Kaushal Shastri	Q62891	3162

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EXAMINER

FOULADI SEMNANI, FARANAK

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/774,877	Applicant(s) SHASTRI ET AL.	
	Examiner Faranak Fouladi	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>02/01/01; 07/26/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: application, filed on 02/01/01; Amendment A, filed on 5/27/03; RCE and amendment C, filed on 2/27/04; IDS filed on 07/26/04; Amendment filed on 08/18/04.
2. Claims 1-21 are pending in the case, with claims 1, 5 and 9 being independent.
3. The present title of the application is "Image display Method, Apparatus and Storage Medium" (as originally filed).
4. **THIS ACTION IS MADE FINAL.**

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
5. Claims 1-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hilton et al. US. 5,452,416.
6. Regarding independent claim 1, "An image display method for displaying a plurality of images on a display means (Hilton discloses in Fig. 3), wherein;

based on at least one display protocol sequence that defines an execution order of a plurality of display protocols for the plurality of images, in which a plurality of display protocols that define a display layout of a plurality of images are lined up in a predetermined order, the display layout of a plurality of images is switched by switching said display protocols by the predetermined order defined in the display protocol sequence and said plurality of images are displayed on said display means using the switched display protocol."

Hilton discloses in Fig. 3 and in col. 11 line 6 – col. 12 line 2 a plurality of function buttons (DONE, CHANGE SERIES, and PRINT), a set of image manipulation icons, and a set of annotation icons which examiner interprets each one as a display protocol sequence. The reason for this interpretation is, when one of these display protocol sequences is activated, it defines the execution order of a plurality of display protocols. For example, it discloses in col. 13 line 59- col. 14 line 10, if one of the image manipulation icons is selected, invokes the riffing function with coupling activated. The images of the series being output through the presentation area are riffled. Also the images of any coupled series are riffled at the presentation area.

Therefore, the display layout of a plurality of images is switched by a predetermined order defined in image manipulation icon (display protocol sequence) and the images of the series are displayed according to the switched display protocol.

Applicant also admits in specification page 3 lines 5-9 that Hilton discloses switching the display layout of a plurality of images by stating “a *method has been provided wherein each series (by type of examination) of images obtained in an examination employing MRI apparatus is lined up and displayed, and at the same time one series of images is switched, another series of images is also switched (refer to U.S. Pat. No. 5,452,416).*”

7. Regarding dependent claim 2, “...therein; for cases in which there are multiple display protocol sequences, the desired display protocol sequence can be selected, and based on the selected display protocol sequence, said plurality of images are displayed on the display means.” Hilton et al. discloses in Fig. 3 and in col. 11 lines 11-col. 12 line 2.
8. Claim 3 is the same as claim 1 and therefore is rejected under the same rationale.
9. Regarding dependent claim 4, “...wherein; the display protocol sequences are created based on the predetermined conditions, and based on said created display protocol sequence, said plurality of images are displayed on the display means.” Hilton et al. discloses in Fig. 3 and in col. 11 lines 23-50.
10. Regarding dependent claim 13, “...wherein said at least one display protocol sequence includes at least two of the plurality of display protocols to be arranged in a predetermined temporal order, said at least two of the

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plurality of display protocols each individually comprising a predetermined spatially ordered arrangement of images selected from said plurality of images." Hilton discloses col. 7 lines 41-49 that a display container is divided into 4 rectangular presentation area that each displays an image series. This is the same as a display protocol sequence that includes a display protocol for dividing the display to 4 areas and another display protocol to display different image series in each divided area. These two display protocols are arranged in a predetermined temporal order since dividing the display protocol is first in time and displaying different image series in each area protocol is next in time. The first protocol arrange the 4 images in a predetermined spatially ordered arrangement (Fig. 4), and the second protocol that displays each image series in each area also comprise a predetermined spatially ordered arrangement of images because the images are in order from 1-n and user can go to each area and look at the images that are placed in order.

11. Regarding dependent claim 16, "...wherein said display protocol sequence includes at least two of the plurality of display protocols to be arranged in a predetermined temporal order and wherein the display protocol sequence can be switched to a different display protocol sequence prior to reaching a last display protocol of the protocol sequence."; claim 16 is rejected under the same rationale as claim 13 and further, Hilton discloses in col. 13 line 59- col. 14 line 10, if one of the image manipulation icons is

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selected, invokes the riffing function with coupling activated. The images of the series being output through the presentation area are riffled. Also the images of any coupled series are riffled at the presentation area. Therefore, the display layout of a plurality of images is switched by a predetermined order defined in image manipulation icon (display protocol sequence) and the images of the series are displayed according to the switched display protocol.

12. Claim 19 is the same as claim 16 and therefore rejected under the same rationale.

13. Claims 5-8, 14, 17 and 20 recite apparatus for performing the method of claims 1-4, 13, 16 and 19; therefore they are similar in scope and rejected under the same rationale.

14. Claims 9-12, 15, 18 and 21 are rejected based on inherent disclosure in Hilton reference because these claims recite a computer-readable medium storing a program for executing the method of claims 1-4, 13, 16 and 19. Having a medium configured to store or transport computer readable code in a computer system is inherent. For example compact disc has been included and used in the computer systems since 1990s or magnetic data storage devices have been used since 1980s.

Response to Arguments

15. Applicant's arguments filed 08/18/04 have been fully considered but they are not persuasive.

16. Applicant argues on page 10 lines 3-7 " Hilton reference would still be deficient at least for failing to teach or suggest that the display protocols are "lined up in a predetermined order...".

Examiner disagrees. Hilton discloses in col. 13 lines 57 – col.14 line 7 that riffle function and coupling function (display protocols) are lined up in a predetermined order. It discloses that first images are riffled and then the images of any coupled series are riffled as well.

17. Applicant argues on page 11 first paragraph, "... Hilton reference requires a physician to specify which images are displayed (see Col. 19 line 14- Col. 20 line 31; as well as Hilton's claim 6).

Examiner disagrees. Hilton discloses the image database structure in Col. 19 line 14- Col. 20 line 31 and in claim 6. Furthermore, Hilton discloses in col. 20 line 12-17, "...each diagnosing physician identifier identifying a diagnosing physician and **including respective fields specifying format preferences and mode preferences of the identified diagnosing physician for displaying images on the display..**"

Therefore, Hilton discloses displaying at least one image series (plurality of images) based on at least one display protocol sequence (physician

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identifier) that defines an execution order of a plurality of display protocols (format preferences and mode preferences of the physician).

18. Applicant argues on page 12 second paragraph "...Hilton's image storing database have absolutely nothing to do with **displaying** a display protocol sequence that defines an execution order of a plurality of display protocols that are lined up in a **predetermined order...**" and further argues on the same page third paragraph, "...What is more Applicant's display protocols are lined up in a predetermined order and are **displayed** based upon a predetermined order.."

But "**displaying** a display protocol sequence" or "display protocols....are **displayed** based upon a predetermined order.." are not claimed in any of the independent or dependent claims.

19. Applicant argues on page 12 last paragraph- page 13 first paragraph, "the Hilton reference is entirely deficient as to the features recited by Applicant's dependent claims 13-15 regarding at least one display protocol sequence including at least two of the plurality of display protocols arranged in a predetermined temporal order, said at least two of the plurality of display protocols each individually comprising a predetermined spatially ordered arrangement."

Examiner disagrees. Hilton discloses col. 7 lines 41-49 that a display container is divided into 4 rectangular presentation area that each

displays an image series. This is the same as a display protocol sequence that includes a display protocol for dividing the display to 4 areas and another display protocol to display different image series in each divided area. These two display protocols are arranged in a predetermined temporal order since dividing the display protocol is first in time and displaying different image series in each area protocol is next in time. The first protocol arrange the 4 images in a predetermined spatially ordered arrangement (Fig. 4), and the second protocol that displays each image series in each area also comprise a predetermined spatially ordered arrangement of images because the images are in order from 1-n and user can go to each area and look at the images that are placed in order.

20. Applicant argues on page 13 second paragraph, "the Hilton reference is entirely deficient as to the features recited by Applicant's dependent claim 19 - 21 regarding the display protocols being switched automatically" Examiner disagrees. Hilton discloses in col. 13 line 59- col. 14 line 10, if one of the image manipulation icons is selected, invokes the riffing function with coupling activated. The images of the series being output through the presentation area are riffled. Also the images of any coupled series are riffled at the presentation area.

Therefore, the display layout of a plurality of images is switched by a predetermined order defined in image manipulation icon (display protocol sequence) and the images of the series are displayed according to the switched display protocol.

Conclusion

21. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faranak Fouladi whose telephone number is **(571) 272-7689**. The examiner can normally be reached on Mon-Fri from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Patrick Edouard** can be reach at **(571) 272-7603**.

Any response to this action should be mailed to:

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Or faxed to: 703-872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to:

United States Patent and Trademark Office
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry of a general nature or relating to the status of this application
or proceeding should be directed to the Technology Center 2600
Customer Service Office whose telephone number is **(571) 272- 2600**.



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER

Faranak Fouladi

Patent Examiner
Art Unit 2674
June 14, 2005